

through 1995. After that time we believe state and federal recovery objectives will have been achieved.

RECENT TRENDS IN COUNTS OF MIGRATING HAWKS FROM WESTERN NORTH AMERICA

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Diurnal raptors were tallied during migration periods at the Wellsville (Utah), Goshute (Nevada), Manzano (New Mexico) and Sandia (New Mexico) mountains for 6–8 years/site between 1977 and 1991. Of several variables analyzed, only the number of observers present ($P < 0.05$) significantly influenced the detection rates of raptors. We adjusted the data to standardize for the duration of sampling period and the number of observers, and applied trend analyses. Trends of 15 raptor species were examined and counts of 11 species were either slightly increasing or showed no change in numbers. Turkey Vultures and Ospreys were significantly increasing. Conversely, counts of migrant Northern Goshawks and Golden Eagles decreased at mean rate of 4.4% and 6.1% per year, respectively. Interpretation of these declines is somewhat enigmatic; however, these patterns are consistent with limited evidence that widespread alteration of forest, and possible rangeland habitats, is occurring in western North America.

NORTH AMERICAN BANDING OF GREAT HORNED OWLS

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The Great Horned Owl, widely distributed across North America, has been banded in every state except Hawaii and in all ten Canadian provinces, with 24 787 banded between 1955 and 1989. Of these, 19 073 were normal wild birds (status 3000), including 17 491 nestlings or flightless young (locals). Numbers banded annually have tended to increase from a low of 131 in 1956 to a high of 1335 in 1986. Over one thousand were also banded annually in 1972, 1976, 1981, 1983, 1987, and 1988. Of 1032 Great Horned Owl banders, 37 have banded 100 or more, at least two of them primarily dealing with rehabilitated owls. States and provinces with the most banded are Saskatchewan (6184), Alberta (1862), Ohio (1768), Wisconsin (1335), and California (1253). To date, there have been 2308 recoveries, a rate of 9.3%, unusually high for a non-game species. Another 296 recoveries are available from banding done between 1920 and 1954, much of it in Ohio, Michigan, and New York. Although a year-round resident previously considered to be non-migratory, individual owls from Alberta, Saskatchewan, Manitoba and North Dakota have travelled great distances: an Alberta owl was caught in a building in Illinois, 2057 km distant, seven months after it was banded as a nestling.

FORAGING RANGE OF RIVER NESTING BALD EAGLES

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In a three-year study of bald eagles in Arizona, we tracked the daily movements of nine radio-tagged adults during the breeding season while simultaneously observing prey deliveries to the nest. The eagles took live and carrion fish in both riverine and lacustrine habitats. We mapped foraging range per kilometer according to the distribution of 1) perching events, 2) direct observations of foraging, and 3) telemetric data on the whereabouts of eagles in the minutes prior to nest delivery. To account for the large number of perching events near the nest that were unrelated to foraging, we weighted the range data according to the proportion of forages occurring in the nest vicinity. Foraging ranges of eagles were a measure of habitat quality and distribution: eagles were attracted to specific habitats where prey were vulnerable, and in most cases these habitats were not homogeneously distributed within the home range. Other factors affecting foraging range included distribution of strategic perches and isolation from disturbance. This study was funded by the U.S. Bureau of Reclamation.

HABITAT USE AND RELATIVE ABUNDANCE OF THE BAT FALCON IN THE SELVA LACANDONA REGION OF CHIAPAS, MEXICO

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The Bat Falcon (*Falco rufigularis*) is among the most common neotropical raptors. Nevertheless, the biology and ecology of this species are poorly documented. The objectives of this study were 1) to evaluate the habitat use by this species along the Lacantún River in the southern portion of the Selva Lacandona and 2) to document seasonal, monthly, diurnal and spatial distributions along the Lacantún drainage. In order to estimate the habitat use and relative abundance, Bat Falcons were surveyed from September 1989 to August 1990 along 24 1-km walking transects (oriented perpendicularly to the river) and 11 15-km river transects along the Lacantún River. The data revealed that the mean relative abundance of the species was greatest between 0 and 100 m from the edge of the river. Bat Falcons tended to use the riparian evergreen tropical forest more often than any other natural or disturbed vegetation types. This species was more abundant during the rainy season. They were rarely detected during the breeding season, which occurs during the dry period of the year. Daily activity was highest during the early and late hours of the day. Recommendations for protecting riparian tropical forests are suggested based on the habitat used by this species. These survey techniques can be useful